

REMARKS

Summary

Claims 1-3, 5-12 and 14-17 remain standing in this application. Claims 4, 13 and 18-19 were previously cancelled without prejudice. Favorable reconsideration and allowance of the standing claims are respectfully requested.

35 U.S.C. § 112

Claims 1-3, 5-12, and 14-17 have been rejected under 35 U.S.C. § 112 for failing to comply with the written description requirement. More particularly, at page 2, paragraph 4 the Office Action states that “the limitation of, ‘indicating said packet array to a protocol stack if said resource state comprises a low resource state to reduce copying of packets between buffers’ is not stated in a manner that would be conclusive to the act of indicating said packet array would ‘reduce copying of packets between buffers.’” Applicant respectfully submits, however, that the above recited limitation is adequately described in the Specification. For example, the Specification at page 12, lines 9-13, states the following:

In this example, a layer above the driver may copy packets 3-7 before the packets are passed to the protocol stack. Packets 6 and 7, however, explicitly indicate a normal resource state thereby removing the need to copy packets 6-7. The NDIS interface does not heed the explicit state, but rather, the decision to copy is based solely on the implicit status, and therefore packets 6-7 may be unnecessarily copied.

The Specification at page 13, lines 7-21, further states:

One embodiment of the invention may reduce the need to copy packets between buffers.... In Windows 2000, Microsoft introduced a feature that allowed NDIS device drivers to be de-serialized or multi-threaded. This allows the driver to be running on multiple processors simultaneously. This means that on one processor the device driver could be indicating received packets, while on another processor NDIS could be returning resources from previously indicated packets that have been processed by the protocol stack. One embodiment of the invention takes advantage of the fact that, on a multiprocessor system the resource state of a de-serialized driver may change while receive indication function is running. In a multiprocessor system, one processor can construct packet arrays and indicate them to the NDIS interface, while on a second processor receive resources can be returned to the driver. **One embodiment of the invention may accomplish this by truncating the receive packet array when a low resource state is encountered.** This technique may be further explained with reference to FIGS. 4-7.

Applicant submits that the above recited language provides one example of clearly describing that indicating the packet array would reduce copying of packets between buffers, since “truncating the receive packet array when a low resource state is encountered” would solve the example problem of “packets 6-7 may be unnecessarily copied.”

Moreover, the Specification at page 16, lines 15-23 provides:

FIG. 5 illustrates a set of packet arrays in accordance with one embodiment of the invention. Unlike the single packet array constructed by conventional methods as shown in FIG. 3, FIG. 5 illustrates 4 packet arrays for the same packet pattern, with each packet having an explicit resource status indicator and an implicit resource status indicator. The embodiment of the invention constructs four arrays (A, B, C, and D), with array A comprising 3 packets (A1-A3), array B comprising 1 packet (B1), array C comprising 1 packet (C1), and array D comprising 2 packets (D1-D2).

As the NDIS interface receives arrays A, B and C, it copies only the last packet of each array. This results in three packets being copied instead of five packets as with the packet array shown in FIG. 3.

Applicant submits that the above recited language provides further teaching that indicating the packet array would reduce copying of packets between buffers. By truncating the packets into arrays A, B, C and D, as opposed to a single array as disclosed in FIG. 3, and only copying the last packet of each array, only three packets are copied. In the arrangement of FIG. 3, five packets are necessarily copied. As a result, the above recited language conclusively teaches that indicating the packet array would reduce the copying of packets between buffers. Therefore, removal of the § 112 rejection is respectfully requested.

Applicant submits that the above remarks are made to overcome the § 112 rejection and are not made to overcome the cited references. Accordingly, these remarks should not be construed in a limiting manner.

35 U.S.C. § 103

At page 3, paragraph 7 of the Office Action claims 1, 2, 5-8, 10, 11 and 14-17 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over United States Patent Number (USPN) 6,765,916 to Duvvuru et al. (“Duvvuru”) in view of USPN 6,651,117 to Wilson et al (“Wilson”). Applicant respectfully traverses the rejection, and requests reconsideration and withdrawal of the obviousness rejection.

The Office Action has failed to meet its burden of establishing a *prima facie* case of obviousness. According to MPEP § 2143, three basic criteria must be met to establish

a *prima facie* case of obviousness. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). See MPEP 706.02(j).

As recited above, to form a *prima facie* case of obviousness under 35 U.S.C § 103(a) the cited references, when combined, must teach or suggest every element of the claim. See MPEP § 2143.03, for example. Applicant respectfully submits that the Office Action has not established a *prima facie* case of obviousness because the cited references, taken alone or in combination, fail to teach or suggest every element recited in claims 1, 2, 5-8, 10, 11 and 14-17. Therefore claims 1, 2, 5-8, 10, 11 and 14-17 define over the cited references whether taken alone or in combination. For example, claims 1 and 10 recite the following language, in relevant part:

indicating said packet array to a protocol stack if said
resource state comprises a low resource state....

According to the Office Action, this language is disclosed by Duvvura at column 12, lines 6-54. Applicant respectfully disagrees. Duvvura at the given cite, in relevant part, states:

Additionally, in an embodiment, if a threshold value for a
given protocol and protocol configuration has not been
achieved but the completed packet has been stored in
memory unit 312, transmitting protocol processing unit 308

proceeds with the processing of this packet to send to framing unit 302. Accordingly, this checking of threshold values by transmitting protocol processing unit 308 precludes underrunning, which is condition wherein transmitting protocol processing unit 308 does not have enough of a data packet to complete the transmission of the entire data packet to framing unit 302.

The above recited language of Duvvura arguably teaches proceeding with the processing of a packet and sending the packet to the framing unit despite the fact that the completed packet has been stored in the memory unit and a threshold value for the given protocol and the protocol configuration has not been achieved. This checking of threshold values is done, arguably, to prevent underrunning. This teaching from Duvvura, however, is significantly different from “indicating said packet array to a protocol stack if said resource state comprises a low resource state” as recited in claims 1 and 10. Nowhere in Duvvura at the given cite is a “protocol stack” or a “low resource state” even disclosed or mentioned. Consequently, Duvvura does not disclose the missing language of “indicating said packet array to a protocol stack if said resource state comprises a low resource state” as recited in claims 1 and 10. Furthermore, Wilson also fails to disclose, teach or suggest the missing language. Accordingly, Duvvura and Wilson, whether taken alone or in combination, fail to disclose, teach or suggest every element recited in claims 1 and 10.

Furthermore, if an independent claim is non-obvious under 35 U.S.C. § 103, then any claim depending therefrom is non-obvious. *See* MPEP § 2143.03, for example. Accordingly, removal of the obviousness rejection with respect to claims 1 and 10 is respectfully requested. Claims 2, 5-8, 11 and 14-17 also are non-obvious and patentable over Duvvura and Wilson, taken alone or in combination, at least on the basis of their

dependency from claims 1 and 10. Applicant, therefore, respectfully requests the removal of the obviousness rejection with respect to these dependent claims.

At page 6, paragraph 25 of the Office Action claim 3 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Duvvura and Wilson and further in view of USPN 5901139 to Shinohara (“Shinohara”). Applicant respectfully traverses the rejection, and requests reconsideration and withdrawal of the obviousness rejection.

Claim 3 depends from claim 1. Duvvura and Wilson fail to disclose all the language of claim 1 as previously discussed. Shinohara also fails to disclose the missing language of claim 1. Consequently, claim 3 represents patentable subject matter in view of the cited references, whether taken alone or in combination, for at least those reasons given for claim 1, and also includes additional features that further distinguish claim 3 from Duvvura, Wilson and Shinohara. Accordingly, removal of the obviousness rejection with respect to claim 3 is respectfully requested.

At page 7, paragraph 32 of the Office Action claims 9 and 12 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Duvvura and Wilson and further in view of USPN 6944168 to Paatela (“Paatela”). Applicant respectfully traverses the rejection, and requests reconsideration and withdrawal of the obviousness rejection.

Claim 9 depends from claim 1 and claim 12 depends from claim 10. Duvvura and Wilson fail to disclose all the language of claims 1 and 10 as previously discussed. Paatela also fails to disclose the missing language of claims 1 and 10. Consequently, claims 9 and 12 represent patentable subject matter in view of the cited references, whether taken alone or in combination, for at least those reasons given for claims 1 and 10, and also includes additional features that further distinguish claims 9 and 12 from

Duvvura, Wilson and Paatela. Accordingly, removal of the obviousness rejection with respect to claims 9 and 12 is respectfully requested.

Conclusion

For at least the above reasons, Applicant submits that claims 1-3, 5-12 and 14-17 recite novel features not shown by the cited references. Further, Applicant submits that the above-recited novel features provide new and unexpected results not recognized by the cited references. Accordingly, Applicant submits that the claims are not anticipated nor rendered obvious in view of the cited references.

Applicant does not otherwise concede, however, the correctness of the Office Action's rejection with respect to any of the dependent claims discussed above. Accordingly, Applicant hereby reserves the right to make additional arguments as may be necessary to further distinguish the dependent claims from the cited references, taken alone or in combination, based on additional features contained in the dependent claims that were not discussed above. A detailed discussion of these differences is believed to be unnecessary at this time in view of the basic differences in the independent claims pointed out above.

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Examiner: England, David E.
TC/A.U. 2143

It is believed that claims 1-3, 5-12 and 14-17 are in allowable form. Accordingly, a timely Notice of Allowance to this effect is earnestly solicited.

The Examiner is invited to contact the undersigned at 724-933-9338 to discuss any matter concerning this application.

The Office is hereby authorized to charge any additional fees or credit any overpayments under 37 C.F.R. § 1.16 or § 1.17 to the credit card in the previously filed credit card authorization form.

Respectfully submitted,

KACVINSKY LLC



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Under 37 CFR 1.34(a)

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